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Mitra Ardron, Natural Innovation .org

Equinox March 2011 newsletter  
- from Byron Bay, Australia

Thanks for the feedback on my first newsletter (<http://naturalinnovation.org/index.php/about-us/newsletter/archive/view/listid-3-byronpersonal/mailid-9-solstice2010-imagesstoriesparimalwinterjpg> ), and the encouragement to produce these regularly.

Of course if you don't want to receive any more of these see the Unsubscribe link at the bottom.

My travels to bridge the gap between innovation and developing countries have continued. So far I've been on the road for 18 months, with only two brief one month trips back home to Australia.

I'll be in San Francisco from April 23rd for a month or so.

Sunvention - funded and delivering products soon

I spent the latter part of 2010 in southern Germany with Sunvention. In early January, Sunvention, was able to come to agreement with a prominent Swiss Foundation to become a majority owner of Sunvention.

The Foundation's main mission is to bring technologies to poor villages in developing countries, and this alignment with Sunvention's core purpose will allow Sunvention to focus on products with the highest humanitarian impact.

Sunvention plans to complete development of some key products and bring them to market in 2011. These products include: SunPulse Water, a solar thermal pump; SunPulse Electric - an off-grid power system; and the SunRay - a heat collection systems for greenhouses;

Sunvention's team has come back together, and production has commenced at their Indonesian partner - ATMI. Distribution will begin initially in India and Indonesia.

Sunvention are still very interested in an investor for the SunPulse Water which has the potential to be commercially viable and have a significant impact.

Their website should be up soon;

Please contact me if you are interested in investing.

The last mile - bridging the distribution gap

One of the biggest challenges of getting technology into the hands of the people who need it is the distribution. It would be naive to think that all is needed is the right "product". Marketing to the bottom of the pyramid is hard - and despite the book (<http://www.amazon.com/exec/obidos/ASIN/0131467506/mitra> ) I have yet to find anyone making a "Fortune at the Base of the Pyramid". I do believe however that in order to scale, we need business models that make technical solutions affordable to villages, and that allow a

supply chain that can operate without continual donations.

This last quarter, I've spent most of the time in India meeting with Social Ventures (NGO's and companies) working to bring technology to rural poor. I talked with seven groups in different states and with different approaches. Most expressed an interest in Sunvention's SunPulse Water and in New World Machine's solar cooling.

It was particularly good to speak with NGO's working effectively like a business, but motivated by impact rather than profit, and I look forward to an effective network that can ease the transition from lab to field.

### OneFridge Project - affordable cooling in developing countries

The most exciting new project I'm working on is "OneFridge".

A Byron based company, New World Machines, is developing a technology that offers significant advantages over existing solar cooling machines. The company is collaborating with an Austrian professor and will commercialise the technology for the global market. The technology has relevance to a number of fields, particularly solar air conditioning and refrigeration.

The Absorption chiller allows up to a 30x reduction in size compared with existing chillers, and also achieves a dramatic reduction in cost, making solar cooling both affordable and practical.

All involved are highly motivated to see their innovation benefit the poor, and New World Machines have created a not for profit project, OneFridge, to achieve this aim.

My focus is on helping to develop OneFridge and assist the team in reaching their humanitarian aims. We are working together to put in place a Humanitarian License (see below) for the technology and will then look at formulating initial humanitarian applications for the technology.

Several of the distribution partners I have been talking to in India have identified rural cold-chain as the most pressing issue. In hot areas, unscrupulous traders can offer a few Rupees per kilo knowing that the farmer has little choice since their product will go bad otherwise. A rural cool store shifts the balance, allowing a farmer to wait for the next trader, or for a village to aggregate produce and rent a truck to market themselves.

A non-profit structure is being established, and we are looking for potential donors or others wishing to be involved. A web site will be up soon.

### Humanitarian Licenses

I've been working on an idea for a simple licensing agreement that for-profit developers of technology can use to allow their inventions to be used for humanitarian purposes. It is intended for use when Open-Source is not appropriate because of the need to protect the investors interests, but where a separate developing country market could be addressed by a non-profit.

I've had assistance from Inder Comar ( <http://www.comarlaw.com> ) a San Francisco based IP attorney in producing a draft and discussions with some other pro-bono attorneys and I hope that we can produce something that is, to patents, what Creative Commons is to copyright, i.e. an easy to use template that encourages material to be more freely available.

Support this work

Almost all the work done in the last eighteen months so far has been at my own expense, any money lent, donated or invested has gone directly to the innovators.

I'm hoping to find one or two donors who agree with me that supporting technology to get out of the lab and into people's hands is important.

If anyone reading this can help - for example by recommending this work to a foundation, or nominating for an award, fellowship or prize, then I'd love to hear from you!

## In Brief

### Urban Ecological Systems

Urban Ecological Systems ( <http://www.urbanecologicalsystems.com> ) have received planning permission for their state of the art integrated organic horticulture & aquaculture plant to be built near Sydney. This site is funded, but they are still looking for investment in the core company.

### Buckminster Fuller Challenge Semi-finalist

I'm proud that an entry I authored for Sunvention has been chosen as a semi-finalist ( [http://challenge.bfi.org/2011Semi\\_Finalist\\_SolarPowerVillages](http://challenge.bfi.org/2011Semi_Finalist_SolarPowerVillages) ) for the Buckminster Fuller Challenge.

### Rural wind installation network

I've been helping an Indian based Ecuadorian - Jorge Ayarza to develop his idea to train a network of village mechanics to build, install and maintain small wind turbines. He's using an open-source design, and will supply key components where it helps reduce costs. {More ( <http://naturalinnovation.org/index.php/innovators/46-jorgeayarza> )}

### Mentoring

I've been involved in a number of mentoring programs over the year and most recently with Villgro ( <http://www.villgro.org/> ), who have an interesting take on it, where they pair an experienced mentor, with a business student. This allows a small amount of the mentors time to leverage a lot of the students time. Both the innovator, and the student gain experience from this. {More ( <http://www.mitra.biz/joomla/index.php/blog/3069-villgro-pip> )}

### Interns and Volunteers

There are some opportunities for technical and business interns or volunteers in Australia, or India, or possibly to get involved remotely.

### Next Few Months

I'm in Byron till April 23rd then in San Francisco for Investors Circle (2-4 May) and in Europe from beginning of June for about a month. After that India is looking likely or else back to US.

## Thanks

Thanks to the people who opened their houses and hearts to me this quarter, Joss & Anita and the crew at Pitchandikulam, Annette, Nikhil & Tanmayo, Rut, and the Gondies, and all those I met on the dance floor.

## Keep in Touch

If you want to keep in touch with what I'm doing, I write an occasional informal blog ( <http://www.mitra.biz/joomla/index.php/blog/3055-scaling> ) on my activities and clean technology in general, and also am expanding the Natural Innovation website ( <http://www.naturalinnovation.org> ) focused on technology for developing countries. You can also find me on facebook ( <http://www.facebook.com/Mitraardron> ) and LinkedIn ( <http://au.linkedin.com/in/mitraardron> ).

For personal contacts, email is best [mitra@mitra.biz](mailto:mitra@mitra.biz). Skype reaches me pretty much anywhere and my id is [mitra\\_earth](#); or you can call +1-510-984-2639, both these are usually forwarded to a local mobile. For the next month, my Australian mobile is +61-414-648-722.

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